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CENTRAL FAX CENTER****FEB 05 2007****REMARKS**

This Amendment is in response to the Office Action mailed on October 3, 2006. Claim 20 is amended editorially and is supported, for example, in the specification on page 26, lines 24-35. No new matter is added. Claims 1-29 remain pending.

**§102(e) Rejections:**

Claims 20 and 21 are rejected as being anticipated by Heemskerk (US Publication No. 2003/0048733). This rejection is traversed.

Claim 20 is directed to an optical recording and reproducing method that requires, among other features, determining a pulse condition by a test recording only for the recording layers in the order later than the recording layer corresponding to the recorded recording layer information and recording the new user data in the recording layers later than the recording layer corresponding to the recorded recording layer information.

Heemskerk does not disclose or teach or suggest these features. Heemskerk is directed to a method for recording on multi-layer phase-change optical discs. Heemskerk does include that areas on the first and second layers of the optical disc may be recorded according to a predefined sequence (see paragraph [0007]). However, nowhere does Heemskerk disclose or teach or suggest determining a pulse condition by a test recording only for the recording layers in the order later than the recording layer corresponding to the recorded recording layer information and recording the new user data in the recording layers later than the recording layer corresponding to the recorded recording layer information. For at least these reasons claim 20 is not anticipated by Heemskerk and should be allowed. Claim 21 depends from claim 20 and should be allowable for at least the same reasons.

**§103(a) Rejections:**

Claims 1-3, 5-6, 11-19 and 22-28 are rejected as being unpatentable over Nakano (US Patent Publication No. 2002/0136122). This rejection is traversed.

Claim 1 is directed to an optical information recording medium that requires, among other features, first to Nth recording layers where at least one of the first to Nth recording layers has a correction information recording portion. The correction

information recording portion contains correction information for correcting a laser beam intensity based on a change in a transmittance of the second to Nth recording layers between an unrecorded state and a recorded state.

Nakano does not teach or suggest these features. Nakano is directed to an optical information recording medium that sets an optimum recording power  $P_o$  and the maximum levels  $I_{topE}$  of a return beam at the time of performing a test recording. Both the optimum recording power  $P_o$  and the maximum levels  $I_{topE}$  are stored temporarily into the memory of a recording and reproducing apparatus after performing the test recording (see paragraphs [0056]-[0059] and [0093]). In contrast, claim 1 requires that correction information for correcting a laser beam intensity based on a change in transmittance of the second to Nth recording layers between an unrecorded state and a recorded state is stored in any one of the first to Nth recording layers of the optical information recording medium. Nowhere does Nakano teach or suggest the correction information recording portion that stores correction information on at least any one of the recording layers of Nakano optical information recording medium. Nakano may teach a lead-in area where maker-recommended recording power is stored but nowhere does Nakano teach or suggest storing correction information for correcting a laser beam intensity based on a change in transmittance of the second to Nth recording layers between an unrecorded state and a recorded state onto the optical recording medium. For at least these reasons claim 1 is not unpatentable over Nakano. Claims 2, 3, 5-9 and 11 depend from claim 1 and should be allowable for at least the same reasons.

Claim 12 is directed to an optical recording and reproducing method for recording information on and reproducing information from an optical information recording medium that has first to Nth recording layers where at least one of the first to Nth recording layers has a correction information recording portion. The correction information recording portion contains correction information for correcting a laser beam intensity based on a change in a transmittance of the second to Nth recording layers between an unrecorded state and a recorded state.

Nakano does not teach or suggest these features. As discussed above, with respect to claim 1, Nakano is directed to an optical information recording medium that sets an optimum recording power  $P_o$  and the maximum levels  $I_{topE}$  of a return beam at the

time of performing a test recording. Both the optimum recording power  $P_0$  and the maximum levels  $I_{\text{loPE}}$  are stored temporarily into the memory of a recording and reproducing apparatus after performing the test recording (see paragraphs [0056]-[0059] and [0093]). In contrast, claim 12 requires that correction information for correcting a laser beam intensity based on a change in transmittance of the second to Nth recording layers between an unrecorded state and a recorded state is stored in any one of the first to Nth recording layers of the optical information recording medium. Nowhere does Nakano teach or suggest the correction information recording portion that stores correction information on at least any one of the recording layers of Nakano optical information recording medium. Nakano may teach a lead-in area where maker-recommended recording power is stored but nowhere does Nakano teach or suggest storing correction information for correcting a laser beam intensity based on a change in transmittance of the second to Nth recording layers between an unrecorded state and a recorded state onto the optical recording medium. For at least these reasons claim 12 is not unpatentable over Nakano. Claims 13-19 depend from claim 12 and should be allowable for at least the same reasons.

Claim 22 is directed to an optical recording and reproducing apparatus for recording information on and reproducing information from an optical information recording medium that has first to Nth recording layers where at least one of the first to Nth recording layers has a correction information recording portion. The correction information recording portion contains correction information for correcting a laser beam intensity based on a change in a transmittance of the second to Nth recording layers between an unrecorded state and a recorded state.

Nakano does not teach or suggest these features. As discussed above, with respect to claims 1 and 12, Nakano is directed to an optical information recording medium that sets an optimum recording power  $P_0$  and the maximum levels  $I_{\text{loPE}}$  of a return beam at the time of performing a test recording. Both the optimum recording power  $P_0$  and the maximum levels  $I_{\text{loPE}}$  are stored temporarily into the memory of a recording and reproducing apparatus after performing the test recording (see paragraphs [0056]-[0059] and [0093]). In contrast, claim 22 requires that the optical recording and reproducing apparatus use optical information recording medium that has correction

information for correcting a laser beam intensity based on a change in transmittance of the second to Nth recording layers between an unrecorded state and a recorded state is stored in any one of the first to Nth recording layers of the optical information recording medium. Nowhere does Nakano teach or suggest the correction information recording portion that stores correction information on at least any one of the recording layers of Nakano optical information recording medium. Nakano may teach a lead-in area where maker-recommended recording power is stored but nowhere does Nakano teach or suggest storing correction information for correcting a laser beam intensity based on a change in transmittance of the second to Nth recording layers between an unrecorded state and a recorded state onto the optical recording medium. For at least these reasons claim 22 is not unpatentable over Nakano. Claims 23-28 depend from claim 22 and should be allowable for at least the same reasons.

Claim 4 is rejected as being unpatentable over Nakano in view of Song (US Patent No. 7,054,240). This rejection is traversed. Claim 4 depends from claim 1 and should be allowable for at least the same reasons described above. Applicants do not concede the correctness of this rejection.

Claims 10 and 29 are rejected as being unpatentable over Nakano in view of Furukawa (US Patent Publication No. 2003/0058771). This rejection is traversed. Claim 10 depends from claim 1 and should be allowable for at least the same reasons described above. Claim 29 depends from claim 22 and should be allowable for at least the same reasons as described above. Applicants do not concede the correctness of this rejection.

Conclusion:

Applicants respectfully assert claims 1-29 are now in condition for allowance. If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicants' primary attorney-of record, Douglas P. Mueller (Reg. No. 30,300), at (612) 455-3804.



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